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EXAMINER

CAMPOS, YAIMA

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/769,030	Applicant(s) OSHIMA ET AL.	
	Examiner YAIMA CAMPOS	Art Unit 2185	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-11, 24-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-11, 24-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. As per the instant Application having Application number 10/769,030, the examiner acknowledges the applicant's submission of the amendment dated August 22, 2008. At this point, claims 10 and 30 have been amended, and claims 1-9 and 12-23 stand cancelled. Claims 10-11 and 24-37 are pending.

REJECTIONS BASED ON PRIOR ART

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 30-32 and 34-37** are rejected under 35 U.S.C. 102(b) as being anticipated by Altschuler et al. (US 6,195,622).

4. As per claim 30, Altschuler discloses A method of operating a storage system comprising: receiving a first command specifying a target computer, an access history identifier associated with the target computer, and an activation condition; detecting the activation condition; **[Altschuler discloses storage system wherein storage devices labeled resources 734 and usage logs 746, resource cache 635', combination of resource server 704 and analysis server 750, client 702 (fig. 7a and related text; col. 19, lines 28-35) wherein different clients access resources through server (col. 8, lines 12-32; col. 30, lines 31-41; figure 5 and related text) wherein like users/clients may grouped (col. 8, lines 53-65)**

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wherein server computer generates usage log which include information of a user (or client) ID, a web address where the resource is located, and a time stamp data structure which includes a time and date relative to a reference time (col. 8, lines 13-32; see figs. 1 and 7a and related text) wherein information is stored for each client in a group of clients (col. 8, lines 33-65) and explains usage logs are not updated merely on the basis of the return of the requested pre-fetch resource but only when client requests resources (col. 29,lin 41-45; col. 27, lines 1-6)]

selecting an access history from a plurality of access histories associated with the target computer using the access history identifier; and updating the selected access history with information about data requested by the target computer **[explains usage logs are not updated merely on the basis of the return of the requested pre-fetch resource but only when client requests resources (col. 29,lin 41-45; col. 27, lines 1-6) and explains “sample period” (col. 9, lines 1-16; col. 21, line 64-col. 22, lines 25) for recording usage data. Altschuler also teaches for each and every access command to the server, by any of a plurality of clients, a client/user id, a time stamp and session id (which comprise history identifiers) are selected and updated/stored in usage logs (See fig. 2 and related text; col. 8, lines 13-32, col. 9, lines 23-43); thus selecting and storing an access history from a plurality of access histories associated with a target computer using the client/target computer’s id and access history identifiers. Altschuler further discloses “from the usage logs 102, the pre-processing unit 170 produces usage trace data 140. The usage trace data 140 includes records 142. A usage trace data record 142 includes user information 144 (which may correspond to the user ID data 106 of the usage log records 104), and session ID data 140. Tough not shown, the usage**

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trace data records 142 may also include a field containing a time stamp 110 information" (col. 9, lines 23-51) in order to create a resource transition probability list for prefetching purposes wherein this process may be done for individual clients whose access history is stored in usage logs or for a group of clients (col. 30, lines 56-63); thus client/user ids and history ids (time stamps and session ids) are inherently used in order to access client-specific access history data to create usage trace data, transition probability and prefetching for a specific client or group of clients].

5. As per claim 31, the combination of Altschuler and Cromer discloses The method of claim 30 wherein the first command specifies a physical storage device, and wherein the selected access history comprises a list of storage locations corresponding to the physical storage device **[Altschuler discloses access commands specify resources and usage history comprises a web address where the resource is located (col. 8, lines 13-32; see figs. 1 and 7a and related text)].**

6. As per claim 32, the combination of Altschuler and Cromer discloses The method of claim 30 wherein the first command includes a computer identifier for specifying the target computer, the method further comprising associating the target computer with the plurality of access histories based upon the computer identifier **[Altschuler discloses usage log includes information of a user (or client) ID, and a time stamp data structure which includes a time and date relative to a reference time (col. 8, lines 13-32; see figs. 1 and 7a and related text)].**

7. As per claim 34, the combination of Altschuler and Cromer discloses The method of claim 30 wherein updating the selected access history further comprises: receiving a read request from the target computer; and adding information about the read request to the selected access

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history if the activation condition is detected [**Altschuler discloses usage logs are not updated merely on the basis of the return of the requested pre-fetch resource but only when client requests resources (col. 29,lin 41-45; col. 27, lines 1-6)]**].

8. As per claim 35, the combination of Altschuler and Cromer discloses The method of claim 34 wherein the activation condition specifies an interval of time, and wherein the selected access history is updated if the read request is received during the specified interval [**Altschuler discloses wherein usage logs are not updated merely on the basis of the return of the requested pre-fetch resource but only when client requests resources (col. 29,lin 41-45; col. 27, lines 1-6) and explains “sample period” (col. 9, lines 1-16; col. 21, line 64-col. 22, lines 25) for recording usage data**].

9. As per claim 36, the combination of Altschuler and Cromer discloses The method of claim 30 further comprising receiving one or more third commands specifying the target computer and a read-ahead history identifier [**Altschuler discloses see (col. 8, lines 12-32) server-side models are built based on data from many users so that server prefetches data to cache data based on resource transition model and based on resource(s) most recently requested by clients wherein caching/prefetching of resources may be carried out for individual clients or for all clients collectively (col. 30 lines 44-63; col. 3, line 64-col. 4, line 8; col. 4. lines 31-39; col. 4, lines 9-29; col. 25, lines 1-9)**].

10. As per claim 37, the combination of Altschuler and Cromer discloses The method of claim 36 further comprising: selecting a second access history from the plurality of access histories associated with the target computer using the read-ahead history identifier; and retrieving data from a storage device in accordance with the second access history; and

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temporarily storing the data retrieved from the storage in a cache memory accessible to the target computer [Altschuler discloses resource pre-fetching by the client utilizes idle processing between the client and the server wherein "based on the previously requested resource... a list of transitions to other resources, in descending order of probability, is used to pre-fetch other resources. Such pre-fetched resources are stored at a client resource cache 624'" (col. 25, lines 1-22, 32-42 and 52-64; col. 26, line 47-col. 27, line 13)].

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 10-11 and 24-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Altschuler et al. (US 6,195,622) in view of Cromer et al. (US 6,177,860).

13. As per claim 10, A system including a storage device having a disk device and a cache memory, a management computer, and a plurality of computers connected to said storage device and classified into a plurality of groups, comprising: [storage devices labeled resources 734 and usage logs 746, resource cache 635', combination of resource server 704 and analysis server 750, client 702 (fig. 7a and related text; col. 19, lines 28-35) wherein different clients access resources through server (col. 8, lines 12-32; col. 30, lines 31-41; figure 5 and related text) wherein like users/clients may grouped (col. 8, lines 53-65)]

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said management computer **configured to transmit** (*interpreted as intended use, see MPEP 2106 II-C*) to said storage device one or more first commands containing information for specifying computers in a first group of computers and an access history identifier for each of the specified computers in said first group; **[server computer generates usage log which include information of a user (or client) ID and a time stamp data structure which includes a time and date relative to a reference time (col. 8, lines 13-32; see figs. 1 and 7a and related text)]** said storage device **configure to maintain** (*interpreted as intended use, see MPEP 2106 II-C*) a plurality of access histories for each computer in the first group of computers wherein, when a computer in said first group of computers specified by said first commands requests data from said storage device, said storage unit records a storage location of the requested data in said disk device as a history that is linked with said access history identifier of said requesting computer specified by said first commands; **[server computer generates usage log which include information of a user (or client) ID, a web address where the resource is located, and a time stamp data structure which includes a time and date relative to a reference time (col. 8, lines 13-32; see figs. 1 and 7a and related text) wherein information is stored for each client in a group of clients (col. 8, lines 33-65); for each and every access command to the server, by any of a plurality of clients, a client/user id, a time stamp and session id (which comprise history identifiers) are selected and updated/stored in usage logs (See fig. 2 and related text; col. 8, lines 13-32, col. 9, lines 23-43); thus selecting and storing an access history from a plurality of access histories associated with a target computer using the client/target computer's id and access history identifiers. Altschuler further discloses "from the usage logs 102, the pre-processing unit 170 produces usage trace data 140. The usage**

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trace data 140 includes records 142. A usage trace data record 142 includes user information 144 (which may correspond to the user ID data 106 of the usage log records 104), and session ID data 140. Though not shown, the usage trace data records 142 may also include a field containing a time stamp 110 information" (col. 9, lines 23-51) in order to create a resource transition probability list for prefetching purposes wherein this process may be done for individual clients whose access history is stored in usage logs or for a group of clients (col. 30, lines 56-63); thus client/user ids and history ids (time stamps and session ids) are inherently used in order to access client-specific access history data to create usage trace data, transition probability and prefetching for a specific client or group of clients]

said management computer **configured to transmit** (*interpreted as intended use, see MPEP 2106 II-C*) to said storage device a second command containing information **for** (*interpreted as intended use, see MPEP 2106 II-C*) specifying one of said computers in said first group of computers and information **for** (*interpreted as intended use, see MPEP 2106 II-C*) specifying a read-ahead access history identifier for said one of said computers, and said access history information; and wherein, in response to said second command, said storage device reads out data linked with said read-ahead access history identifier from said disk device to said cache memory, [see (col. 8, lines 12-32) **server-side models are built based on data from many users so that server prefetches data to cache data based on resource transition model and based on resource(s) most recently requested by clients wherein caching/prefetching of resources may be carried out for individual clients or for all clients collectively (col. 30 lines 44-63; col. 3, line 64-col. 4, line 8; col. 4. lines 31-39) wherein users may be clustered into**

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one or more clusters (col. 31, lines 39-48) wherein usage logs are not updated merely on the basis of the return of the requested pre-fetch resource but only when client requests resources (col. 29,lin 41-45; col. 27, lines 1-6)] after issuing the second command to the storage device, said management computer causes said one of said computers in said first group of computers specified in said second command to start **[resource pre-fetching by the client utilizes idle processing between the client and the server wherein "based on the previously requested resource... a list of transitions to other resources, in descending order of probability, is used to pre-fetch other resources. Such pre-fetched resources are stored at a client resource cache 624'" (col. 25, lines 1-22, 32-42 and 52-64; col. 26, line 47-col. 27, line 13) wherein it can be said that when the communication between client and server is idle, and the pre-fetching from the server to the client begins, the client starts, note the client was previously idle]**; however, Altschuler does not disclose expressly said management computer/server causes said one of said computers in said first group of computers specified in said second command to start.

Cromer discloses after issuing the second command to the storage device, said management computer causes said one of said computers in said first group of computers specified in said second command to start as **[a computer network wherein "the server polls the computer by MAC address and wakes up the computer for configuration and pre-loading" (col. 3, lines 50-55) wherein data that is preloaded corresponds to "characteristics unique to the operator or workstation to which the computer will be assigned. Examples are the users name, network configuration parameters, and the identity of the programs that will be needed tin the workstation of each computer" (col. 1, lines 35-40)].**

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Altschuler and Cromer are analogous art in that they are of the same field of endeavor, that is, a system and/or method of memory access and control in a network environment. Cromer suggests that it would have been desirable to incorporate the feature of having a management computer/server cause a computer to start so that preloading/prefetching of relevant data begins into the system of Altschuler because this would allow for fast starting and preloading of information to the computer without user intervention [(col. 1, lines 50-56; col. 3, lines 50-65)]. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Altschuler as suggested by Cromer to incorporate the feature as claimed.

14. As per claim 11, the combination of Altschuler and Cromer discloses A system according to claim 10, wherein said management computer maintains a schedule **for** (*interpreted as intended use, see MPEP 2106 II-C*) interacting with said first group of computers and said storage device, and wherein said management computer transmits said first commands and second command to said storage device based on said schedule [**Atschuler discloses “sample period” (col. 9, lines 1-16; col. 21, line 64-col. 22, lines 25) and prefetching during idle processing (col. 4, lines 9-29; col. 25, lines 1-9)**].

15. As per claim 24, the combination of Altschuler and Cromer discloses A system according to claim 10, wherein the first commands include activation conditions and wherein the storage device begins recording the history of a requesting computer upon detecting the activation condition corresponding to that requesting computer [**Atschuler discloses recording client usage data of multiple clients in usage logs (col. 8, lines 13-32) wherein wherein usage logs**

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are not updated merely on the basis of the return of the requested pre-fetch resource but only when client requests resources (col. 29,lin 41-45; col. 27, lines 1-6)].

16. As per claim 25, the combination of Altschuler and Cromer discloses A system according to claim 24, wherein the activation condition specify an interval during which the history of requesting computers is recorded at the storage device **[Atschuler discloses wherein usage logs are not updated merely on the basis of the return of the requested pre-fetch resource but only when client requests resources (col. 29,lin 41-45; col. 27, lines 1-6) and explains “sample period” (col. 9, lines 1-16; col. 21, line 64-col. 22, lines 25) for recording usage data].**

17. As per claim 26, the combination of Altschuler and Cromer discloses A system according to claim 24, wherein the activation conditions specify a time at which the storage device starts recording the history of requesting computers **[The rationale in the rejection to claim 25 is herein incorporated].**

18. As per claim 27, the combination of Altschuler and Cromer discloses A system according to claim 10, wherein the access histories comprise lists of storage locations corresponding to read requests received directly from one or more of said first group of computers by the storage device **[Altschuler discloses server computer generates usage log which include information of a user (or client) ID, a web address where the resource is located, and a time stamp data structure which includes a time and date relative to a reference time (col. 8, lines 13-32; see figs. 1 and 7a and related text) wherein information is stores for each client in a group of clients (col. 8, lines 33-65)].**

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19. As per claim 28, the combination of Altschuler and Cromer discloses A system according to claim 10, wherein the storage device associates each computer in the first group of computers with its plurality of access histories using a computer identifier **[each computer in the usage log is associated with user or client ID (col. 8, lines 13-32; see figs. 1 and 7a and related text)]**.

20. **Claim 29** is rejected under 35 U.S.C. 103(a) as being unpatentable over Altschuler et al. (US 6,195,622) in view of Cromer et al. (US 6,177,860) as applied to claims 10 and 28 above, and further in view of Parrella, SR. et al. (US 2003/0078964).

21. As per claim 29, the combination of Altschuler and Cromer discloses A system according to claim 28, but does not disclose expressly wherein computer identifiers for the first group of computers change from time to time, and wherein the management computer detects these changes and notifies the storage device of the new identifiers.

Parrella discloses computer identifiers for the first group of computers change from time to time, and wherein the management computer detects these changes and notifies the storage device of the new identifiers as **[a storage system that uses user's characteristics and usage patterns to determine when to cache and for how long and what to prefetch (par. 0013) wherein the system may employ dynamic IP addresses and includes a USER ID to maximize cache performance wherein each time a user with a dynamic IP connects to super cache, the user ID is stored in data table 740 (pars. 0081 and 0121)]**.

Altschuler, Cromer and Parrella are analogous art in that they are of the same field of endeavor, that is, a system and/or method of memory access and control in a network environment. Parrella suggests that it would have been desirable to incorporate the feature of having computer identifiers for the first group of computers change from time to time, and

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wherein the management computer detects these changes and notifies the storage device of the new identifiers into the combined system of Altschuler and Cromer because this would allow maximized performance as it would "maximize the use of information previously cached for each user with dynamically assigned IP addresses, even though the IP addresses may have changed" [(pars. 0081 and 0121)]. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Altschuler and Cromer as suggested by Parrella to incorporate the feature as claimed.

22. **Claim 33** is rejected under 35 U.S.C. 103(a) as being unpatentable over Altschuler et al. (US 6,195,622) as applied to claim 30 above, and further in view of Parrella, SR. et al. (US 2003/0078964).

23. As per claim 33, the combination of Altschuler discloses The method of claim 30 but does not disclose expressly receiving, from time to time, second commands with information for updating the computer identifier of the target computer.

Parrella discloses receiving, from time to time, second commands with information for updating the computer identifier of the target computer as **[a storage system that uses user's characteristics and usage patterns to determine when to cache and for how long and what to prefetch (par. 0013) wherein the system may employ dynamic IP addresses and includes a USER ID to maximize cache performance wherein each time a user with a dynamic IP connects to super cache, the user ID is stored in data table 740 (pars. 0081 and 0121)]**.

Altschuler and Parrella are analogous art in that they are of the same field of endeavor, that is, a system and/or method of memory access and control in a network environment. Parrella suggests that it would have been desirable to incorporate the feature of receiving, from time to

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time, second commands with information for updating the computer identifier of the target computer into the system/method of Altschuler because this would allow maximized performance as it would “maximize the use of information previously cached for each user with dynamically assigned IP addresses, even though the IP addresses may have changed” [(**pars. 0081 and 0121**)]. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the Altschuler as suggested by Parrella to incorporate the feature as claimed.

ACKNOWLEDGMENT OF ISSUES RAISED BY THE APPLICANT

Response to Amendment

24. Applicant's arguments filed on August 22, 2008 have been fully considered but are not deemed persuasive.

25. As required by **M.P.E.P. § 707.07(f)**, a response to these arguments appears below.

ARGUMENTS CONCERNING PRIOR ART REJECTIONS

26. Claims must be given the broadest reasonable interpretation during examination and limitations appearing in the specification but not recited in the claim are not read into the claim (See M.P.E.P. 2111 [R-1]).

27. With respect to claim 30:

28. Applicant argues Altschuler does not disclose “that the Internet server maintains a plurality of access histories associated with each computer which accesses the server, or that the server selects among the plurality of access histories using an access history identifier received

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with a first command. Instead Altschuler disclosing a single usage log having information about all resource requests received at the server"

In response, these arguments have been fully considered, but are not deemed persuasive since Altschuler discloses maintaining a plurality of access histories associated with each computer which accesses the server as **[usage log is maintained for one or more clients, including the user/client id for each and every client accessing the server (See fig. 2 and related text; col. 8, lines 13-32, col. 9, lines 23-43)]** and selects among the plurality of access histories using an access history identifier received with a first command **[for each and every access command to the server, by any of a plurality of clients, a client/user id, a time stamp and session id (which comprise history identifiers) are selected and updated/stored in usage logs (See fig. 2 and related text; col. 8, lines 13-32, col. 9, lines 23-43) and further discloses "from the usage logs 102, the pre-processing unit 170 produces usage trace data 140. The usage trace data 140 includes records 142. A usage trace data record 142 includes user information 144 (which may correspond to the user ID data 106 of the usage log records 104), and session ID data 140. Tough not shown, the usage trace data records 142 may also include a field containing a time stamp 110 information" (col. 9, lines 23-51) in order to create a resource transition probability list for prefetching purposes wherein this process may be done for individual clients whose access history is stored in usage logs or for a group of clients (col. 30, lines 56-63); thus client/user ids must inherently be used to access client-specific data].**

29. Applicant remarks that the Altschuler does not teach "selecting an access history from a plurality of access histories associated with target computer using the access history identifier"

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nor "updating the selected access history with information about data requested by the target computer" as "there is no teaching or suggestion that an access history identifier is used to select among a plurality of access histories associated with a specified target computer" and "there is no teaching or suggestion that the Internet server updates a specific access history that is selected from a plurality of access histories using the access history identifier. Instead, the same usage log is updated regardless of which computer accesses resources through the server."

In response, these remarks have been fully considered, but are not deemed persuasive.

Altschuler discloses teach "selecting an access history from a plurality of access histories associated with target computer using the access history identifier" as **[for each and every access command to the server, by any of a plurality of clients, a client/user id, a time stamp and session id (which comprise history identifiers) are selected and updated/stored in usage logs (See fig. 2 and related text; col. 8, lines 13-32, col. 9, lines 23-43); thus selecting and storing an access history from a plurality of access histories associated with a target computer using the client/target computer's id and access history identifiers. Altschuler further discloses "from the usage logs 102, the pre-processing unit 170 produces usage trace data 140. The usage trace data 140 includes records 142. A usage trace data record 142 includes user information 144 (which may correspond to the user ID data 106 of the usage log records 104), and session ID data 140. Tough not shown, the usage trace data records 142 may also include a field containing a time stamp 110 information" (col. 9, lines 23-51) in order to create a resource transition probability list for prefetching purposes wherein this process may be done for individual clients whose access history is stored in usage logs or for a group of clients (col. 30, lines 56-63); thus client/user ids and history ids**

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(time stamps and session ids) are inherently used in order to access client-specific access history data to create usage trace data, transition probability and prefetching for a specific client or group of clients] and "updating the selected access history with information about data requested by the target computer" as **[for each and every access command to the server, by any of a plurality of clients, a client/user id, a time stamp and session id (which comprise history identifiers) are selected and updated/stored in usage logs (See fig. 2 and related text; col. 8, lines 13-32, col. 9, lines 23-43); thus creating a plurality of access histories for each client or target computer requesting access to the server, note that every entry to the usage log comprises user/client id, and time stamp and session id].**

30. **With respect to claim 10:**

31. Regarding claim 10, Applicant's remarks parallel those presented with respect to claim 30 and have addressed in the same manner that claim 30 has been addressed above.

32. Applicant further argues the combination of Altschuler and Cromer does not disclose "said storage unit *record a storage location of the requested data in said disk device as a history that is linked with said access history identifier of said requesting computer specified by said first command.*"

In response, these arguments have been fully considered but they are not persuasive since the combination of Altschule and Cromer discloses "said storage unit *record a storage location of the requested data in said disk device as a history that is linked with said access history identifier of said requesting computer specified by said first command*" as **[for each and every access command to the server, by any of a plurality of clients, a client/user id, a time stamp and session id (which comprise history identifiers) and a resource id (which comprises a**

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storage location of the requested data) are selected and updated/stored in usage logs (See fig. 2 and related text; col. 8, lines 13-32, col. 9, lines 23-43); thus creating a plurality of access histories for each client or target computer requesting access to the server; note that "the ID 108 is a data structure which identifies the resource and preferably also identifies a category (e.g., HTML page, JPEG file, MPEG file, sound bit, GIF, etc.) to which the resource belongs. The resource ID 108 may be a URL (i.e., the World Wide Web address at which the resource is located)" (col. 8, lines 13-32)].

Claim 33

33. The heading for the rejection to claim 33 had a typographical error stating claim 30 had been rejected over the combination of Altschuler and Cromer; however, this typographical error has been corrected.

34. Note regarding intended use language:

35. The limitations interpreted as intended should be positively recited by avoiding such intended use language, such as "adapted/configured to," and "for;" which suggest that the claims do not really require functional limitations. For examples, Applicant might consider reciting "said management computer transmits to said storage device" in claim 10 instead of reciting "said management computer configure to transmit to said storage device."

36. Regarding all other Claims not specifically traversed above and whose rejections were upheld, the Applicant contends that the listed claims are allowable by virtue of their dependence on other allowable claims. As this dependence is the sole rationale put forth for the allowability of said dependent claims, the Applicant is directed to the Examiner's remarks above.

Additionally, any other arguments the Applicant made that were not specifically addressed in

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this Office Action appeared to directly rely on an argument presented elsewhere in the Applicant's response that was traversed, rendered moot or found persuasive above.

37. All arguments by the applicant are believed to be covered in the body of the office action; thus, this action constitutes a complete response to the issues raised in the remarks dated August 22, 2008.

CLOSING COMMENTS

Conclusion

38. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Examiner's Note

39. Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the

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individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

a. STATUS OF CLAIMS IN THE APPLICATION

40. The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P. 707.07(i)**:

a(1) CLAIMS REJECTED IN THE APPLICATION

41. Per the instant office action, claims 10-11 and 24-37 have received an action on the merits and are subject of a final rejection.

a(2) CLAIMS NO LONGER UNDER CONSIDERATION

42. Claims 1-9 and 12-23 have been canceled as of Amendment dated August 22, 2008.

b. DIRECTION OF FUTURE CORRESPONDENCES

43. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaima Campos whose telephone number is (571) 272-1232. The examiner can normally be reached on Monday to Friday 8:30 AM to 5:00 PM.

IMPORTANT NOTE

44. If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Sanjiv Shah, can be reached at the following telephone number: Area Code (571) 272-4098.

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The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 17, 2008

/Yaima Campos/
Examiner, Art Unit 2185

/Sanjiv Shah/
Supervisory Patent Examiner, Art Unit 2185